

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001348

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. 7: G01N 33/483, H01J 49/40

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPIDS, MEDLINE, CA; KEYWORDS: PROBABILITY, LIKELIHOOD, STATISTICS, SCORE, ESTIMATION, PATTERN, MASS SPECTROMETRY, GLYCANS, SUGARS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2001/096861 A (ERIKSON J.) 20 December 2001 Abstract, p9 line 25-p12 line 20, claims	1 (partial), 2-9
Y	US 6489608 B (SKILLING) 3 December 2002 Abstract, column 10 line 9-column 11 line 54, Table 1, claims	1 (partial), 2-9
Y	COOPER C. et al, "GlycoSuiteDB: a new curated relational database of glycoprotein glycan structures and their biological sources" Nucleic Acids Research (2001) Vol 29, No 1, p332-335. Abstract	1(partial), 2-9

 Further documents are listed in the continuation of Box C See patent family annex

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"E" earlier application or patent but published on or after the international filing date

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"O" document referring to an oral disclosure, use, exhibition or other means

"&amp;" document member of the same patent family

"P" document published prior to the international filing date but later than the priority date claimed

Date of the actual completion of the international search  
23 November 2004Date of mailing of the international search report  
29 NOV 2004

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6393367 B (TANG et al) 21 May 2002 Abstract, column 5 line 48-column 10 line 66, examples, claims 1-17	1, 4, 8
P,A	WO 2004/024654 A (CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE et al) 25 March 2004 Abstract	
A	COOPER C. et al, "Glycomod – A software tool for determining glycosylation compositions from mass spectrometric data" Proteomics (2001) Vol 1, p 340-349 Abstract	
P,A	JOSHI H, et al, "Development of a mass fingerprinting tool for the automated interpretation of oligosaccharide fragmentation data" Proteomics (2004) Vol 4 p1650-1664 Abstract, Table 1-2	
A	WO 2003/054549 A (MICROMASS LTD) 3 July 2003 Abstract, p55-61, claims	
P,A	WO 2004/061407 A (CAPRION PHARMACEUTICALS) 22 July 2004 Abstract, claims 1-7, 30	

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### Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.: 1 (partially)  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
Claim 1 is too vague and is not adequately supported by the description. The search on claim 1 (and claims appended to it) has been limited to methods of identifying glycans on the basis of mass utilising statistical analyses of frequencies of subunits/fragments of the glycan, or to a method comprising the features of claim 2.
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

### Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

#### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/AU2004/001348**

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member				
WO	2001/096861	AU	64517/01	SE	0002214			
US	6489608	CA	2303758	CA	2303761	EP	1047107	
		EP	1047108	US	6489121			
US	6393367		NONE					
WO	2004/024654	FR	2844357					
WO	2003/054549	CA	2465297	EP	1456667	EP	1469313	
		EP	1469314	EP	1469315	GB	2385918	
		GB	2394545	GB	2395271	GB	2396914	
WO	2004/061407		NONE					

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX